Appendix A

A systems' check to answer the question: Where does intervention for novice reduction fit into what Kentucky already knows about the *Characteristics of Highly Effective Teaching and Learning* that are common to all content areas and the *Kentucky Framework for Teaching* used in the Professional Growth and Effectiveness System (PGES)?

Characteristics of Highly Effective Teaching and Learning (CHETL)	Novice Reduction Work Process Alignment	PGES Alignment *Kentucky Framework for Teaching (KFfT)*	Leverage process/component system for novice reduction
Instructional rigor and student engagement	Instruction; Environment and Support	Domain 1: Planning and Preparation Domain 3: Instruction	Culturally Responsive Instruction; Literacy Design Collaborative (LDC); Math Design Collaborative (MDC); Co-Teaching For Gap Closure (CT4GC); Academic Continuum; Advising
Teacher instructs the complex processes, concepts and principles contained in state and national standards using differentiated strategies that make instruction accessible to all students.	Instruction; Environment and Support	1A-Knowledge of Content and Pedagogy 1E-Designing Coherent Instruction	CT4GC; LDC; MDC; Standards and Curriculum; Continuum for Success; Advising; Continuous Improvement
Teacher scaffolds instruction to help students reason and develop problem-solving strategies.	Instruction; Environment and Support	1E-Designing Coherent Instruction 3A-Communication with Students	CT4GC; LDC; MDC; Academic Continuum
Teacher orchestrates effective classroom discussions, questioning, and learning tasks that promote higher-order thinking skills.	Instruction; Environment and Support	3B-Using Questioning and Discussion Techniques	CT4GC; LDC; MDC; Academic Continuum
Teacher provides meaningful learning opportunities for students.	Instruction; Environment and Support	1E-Designing Coherent Instruction	Assessment Literacy; Academic Continuum; Culturally Responsive Instruction

Teacher challenges students to think deeply about problems and encourages/models a variety of approaches to a solution.	Instruction; Environment and Support	1E-Designing Coherent Instruction 3C-Engaging Students in Learning	CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement
Teacher integrates a variety of learning resources with classroom instruction to increase learning options.	Instruction; Environment and Support	1B-Demonstrating Knowledge of Students 1D-Demonstrating Knowledge of Resources	CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement
Teacher structures and facilitates ongoing formal and informal discussions based on a shared understanding of rules and discourse.	Instruction; Environment and Support	3A-Communicating with Students 3B-Using Questioning and Discussion Techniques	Behavior Continuum; Academic Continuum; Continuous Improvement; Assessment Literacy
Teacher integrates the application of inquiry skills into learning experiences	Instruction; Environment and Support	3C-Engaging Students in the Learning	CT4GC; LDC; MDC; Academic Continuum; Culturally Responsive Instruction; Continuous Improvement
Teacher clarifies and shares with students learning intentions/targets and criteria for success.	Instruction; Environment and Support	1C-Selecting Instructional Outcomes 3A-Communicating with Students	Continuum For Success; Academic Continuum; Behavior Continuum; Continuous Improvement
Student articulates and understands learning intentions/targets and criteria for success.	Instruction; Environment and Support	Student Voice	Continuum For Success; Academic Continuum; Behavior Continuum; CT4GC; Continuous Improvement
Student reads with understanding a variety of texts.	Instruction; Environment and Support	Student Voice	Standards, LDC
Student applies and refines inquiry skills.	Instruction; Environment and Support	Student Voice	LDC; MDC; Assessment Literacy; Continuous Improvement; Culturally Responsive Instruction

Instructional Relevance	Instruction; Environment and Support; Curriculum and Standards; Continuous Improvement; Assessment	Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 4: Professional Responsibilities	Culturally Responsive Instruction; LDC; MDC; CT4GC; Deploying Standards; Career Pathways; Continuum for Success; Academic Continuum; Advising; Data Analysis; Continuous Improvement
Teacher designs learning opportunities that allow students to participate in empowering activities in which they understand that learning is a process and mistakes are a natural part of the learning.	Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment	1E-Designing Coherent Instruction 2B-Establising a Culture for Learning	LDC; MDC, Culturally Responsive Instruction, CT4GC
Teacher links concepts and key ideas to students' prior experiences and understandings, uses multiple representations, examples and explanations.	Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment	1B-Demonstrating Knowledge of Students	Standards and Curriculum
Teacher incorporates student experiences, interests and real life situations in instruction.	Instruction; Environment and Support Curriculum and Standards Continuous improvement and assessment	1B-Demonstrating Knowledge of Students	Standards and Curriculum; Culturally Responsive Instruction
Teacher selects and utilizes a variety of technology that support student learning.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	1D-Demonstrating Knowledge of Resources 1E-Designing Coherent Instruction	Standards and Curriculum; Continuum for Success

Teacher effectively incorporates 21st Century Learning Skills that prepare students to meet future challenges.	Instruction; Environment and Support; Curriculum and Standards; Continuous Improvement; Assessment	1E-Designing Coherent Instruction	Standards and Curriculum, Continuum for Success
Teacher works with other teachers to make connections between and among disciplines.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	4D-Participating in a Professional Community 4E-Growing and Developing Professionally	Data Review, Analysis and Use; Continuous Improvement
Teacher makes lesson connections to community, society and current events.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	1D-Demonstrating Knowledge of Resources	Standards and Curriculum; Culturally Responsive Instruction; Advising
Student poses and responds to meaningful questions.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Culturally Responsive Instruction; Standards and Curriculum; LDC; MDC; CT4GC
Student uses appropriate tools and techniques to gather, analyze and interpret information from quantitative and qualitative evidence.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement

Student develops descriptions, explanation, predictions and models using evidence.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement
Student works collaboratively to address complex, authentic problems, which require innovative approaches to solve.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Standards and Curriculum; Assessment Literacy; Tiered Academic Interventions; Continuous Improvement; LDC; MDC; CT4GC
Student communicates knowledge and understanding in a variety of real-world forms.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Standards and Curriculum; Assessment Literacy; Academic Continuum; Continuous Improvement; LDC; MDC; CT4GC
Student communicates knowledge and understanding for a variety of purposes.	Instruction; Environment and Support; Standards and Curriculum; Continuous Improvement; Assessment	Student Voice and engagement	Standards and Curriculum; Assessment Literacy; Academic Continuum; Continuous Improvement; LDC; MDC; CT4GC
Knowledge of Content	**Standards and Curriculum; Instruction; Environment and Support**	**Domain 1: Planning and Preparation** **Domain 2: Classroom Environment** **Domain 3: Instruction** **Domain 4:**	**Deploying Standards; Career Pathways; Continuum For Success; Culturally Responsive Instruction; LDC; MDC; CT4GC; Academic Continuum; Advising**

		Professional Responsibilities	
Teacher demonstrates an understanding and in depth knowledge of content and maintains an ability to convey this content to students.	Standards and Curriculum; Instruction; Environment and Support	1A-Demonstrating Knowledge of Content and Pedagogy 3A-Communicating with Students	Standards and Curriculum; LDC; MDC; CT4C; Academic Continuum
Teacher maintains on going knowledge and awareness of current content developments.	Standards and Curriculum; Instruction; Environment and Support	1A-Demonstrating Knowledge of Content and Pedagogy 4E-Growing and Developing Professionally	Standards and Curriculum; Continuous Improvement
Teacher designs and implements standards based courses/lessons/units using state and national standards.	Standards and Curriculum; Instruction; Environment and Support	1E-Designing Coherent Instruction	Standards and Curriculum; Continuous Improvement; Culturally Responsive Instruction
Teacher uses and promotes the understanding of appropriate content vocabulary.	Standards and Curriculum; Instruction; Environment and Support	1A-Demonstrating Knowledge of Content and Pedagogy	Standards and Curriculum; Continuous Improvement; Culturally Responsive Instruction
Teacher provides essential supports for students who are struggling with the content.	Standards and Curriculum; Instruction; Environment and Support	3C-Engaging Students in the Learning 3E-Demonstrating Flexibility and Responsiveness	Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction, Behavior Continuum
Teacher accesses a rich repertoire of instructional practices, strategies, resources and applies them appropriately.	Standards and Curriculum; Instruction; Environment and Support	1A-Demonstrating Knowledge of Content and Pedagogy 1E-Designing Coherent Instruction	Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum

Student demonstrates growth in content knowledge.	Standards and Curriculum; Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum
Student uses and seeks to expand appropriate content vocabulary.	Standards and Curriculum; Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Assessment Literacy; Advising; Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum
Student connects ideas across content areas.	Standards and Curriculum; Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Assessment Literacy; Advising, Continuous Improvement; Culturally Responsive Instruction; Behavior Continuum; Standards and Curriculum
Student uses ideas in realistic problem situations.	Standards and Curriculum; Instruction; Environment and Support	Student Voice and engagement	Continuum for Student Success; Standards and Curriculum
Learning Climate	**Instruction; Environment and Support**	**Domain 1: Planning and Preparation** **Domain 2: Classroom Environment** **Domain 3: Instruction**	**Academic Continuum; Advising; Bullying Prevention; Positive Behavioral Interventions and Supports (PBIS); Behavior Continuum; Culturally Responsive Instruction; LDC; MDC; CT4GC**
Teacher creates learning environments where students are active participants as individuals and as members of collaborative groups.	Instruction; Environment and Support	2B-Establishing a Culture for Learning	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction

Teacher motivates students and nurtures their desire to learn in a safe, healthy and supportive environment which develops compassion and mutual respect.	Instruction; Environment and Support	2A-Creating an Environment of Respect and Rapport 2E-Organizing Physical Space	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Teacher cultivates cross cultural understandings and the value of diversity	Instruction; Environment and Support	1B-Demonstrating Knowledge of Students 2A-Creating an Environment of Respect and Rapport	Culturally Responsive Instruction; Continuous Improvement
Teacher encourages students to accept responsibility for their own learning and accommodates the diverse learning needs of all students.	Instruction; Environment and Support	1C-Selecting Instructional Outcomes 2B-Establishing a Culture for Learning	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction; Continuous Improvement
Teacher displays effective and efficient classroom management that includes classroom routines that promote comfort, order and appropriate student behaviors.	Instruction; Environment and Support	2C-Managing Classroom Procedures 2D-Managing Student Behavior	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Teacher provides student equitable access to technology, space tools and time.	Instruction; Environment and Support	1D-Demonstrating Knowledge of Resources 2E-Organizing Physical Space	Academic And Behavior Continuum, LDC; MDC; CT4GC
Teacher effectively allocates times for students to engage in hands on experiences, discuss and process content, and make meaningful connections.	Instruction; Environment and Support	2C-Managing Classroom Procedures 3C-Engaging Students in the Learning	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Teacher designs lessons that allow students to participate in empowering	Instruction; Environment and Support	1E-Designing Coherent Instruction	Academic Continuum; Advising; Bullying Prevention; PBIS;

activities in which they understand that learning is a process and mistakes are a natural part of learning.		2B-Establishing a Culture for Learning	Behavior Continuum; Culturally Responsive Instruction
Teacher creates an environment where student work is valued, appreciated and used as a learning tool.	Instruction; Environment and Support	2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction	Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive,
Student accepts responsibility for his/her own learning	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Istruction
Student actively participates and is authentically engaged.	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Student collaborates/teams with other students	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Student exhibits a sense of accomplishment and confidence	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum, Advising, Bullying Prevention, PBIS, Behavior Continuum, Culturally Responsive,
Student takes educational risks in class.	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum; Culturally Responsive Instruction
Student practices and engages in safe, responsible and ethical use of technology.	Instruction; Environment and Support	Student Voice and engagement	Academic Continuum; Advising; Bullying Prevention; PBIS; Behavior Continuum;

Classroom Assessment and Reflection	Assessment Literacy; Data, Analysis and Use	Domain 1: Planning and Preparation Domain 2: Classroom Environment Domain 3: Instruction Domain 4: Professional Responsibilities	Culturally Responsive Instruction; Continuous Improvement Continuous Improvement; Assessment Literacy
Teacher uses multiple methods to systematically gather data about student understanding and ability.	Assessment Literacy; Data, Analysis and Use	1F-Designing Student Assessment 3D-Using Assessment in Instruction 4A-Reflecting on Teaching	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement
Teacher uses student work/data, observations of instruction, assignments and interactions with colleagues to reflect on and improve teaching practice.	Assessment Literacy; Data, Analysis and Use	1F-Designing Student Assessment 3D-Using Assessment in Instruction 4A-Reflecting on Teaching	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement
Teacher revises instructional strategies based upon student achievement data.	Assessment Literacy; Data, Analysis and Use	1F-Designing Student Assessments 3D-Using Assessment in Instruction 4A-Reflecting on Teaching	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher uncovers students' prior understanding of the concepts to be addressed and addresses students'	Assessment Literacy; Data, Analysis and Use	1F-Designing Student Assessments 3D-Using Assessment in Instruction	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum

misconceptions/incomplete conceptions.			
Teacher co-develops scoring guides/rubrics with students and provides adequate modeling to make clear the expectations for quality performance.	Assessment Literacy; Data, Analysis and Use	1C-Selecting Instructional Outcomes 3D-Using Assessment in Instruction	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher guides students to apply rubrics to assess their performance and identify improvement strategies.	Assessment Literacy; Data, Analysis and Use	2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher provides regular timely feedback to students and parents that moves learners forward.	Assessment Literacy; Data, Analysis and Use	3D-Using Assessment in Instruction 4C-Communicating with Families	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher allows students to use feedback to improve their work before a grade is assigned.	Assessment Literacy; Data, Analysis and Use	3D-Using Assessment in Instruction 3E-Demonstrating Flexibility and Responsibility	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher facilitates students in self- and peer-assessments.	Assessment Literacy; Data, Analysis and Use	2B-Establishing a Culture for Learning 3D-Using Assessment in Instruction	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Teacher reflects on instruction and makes adjustments as student learning occurs.	Assessment Literacy. Data, Analysis and Use	3D-Using Assessment in Instruction 3E-Demonstrating Flexibility and Responsibility 4A-Reflecting on Instruction	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Student recognizes what proficient work looks like and determines steps	Assessment Literacy;	Student Voice and engagement	Assessment Literacy; Data Review, Analysis and Use; Continuous

necessary for improving his/her work.	Data, Analysis and Use		Improvement; Academic Continuum
Teacher and student monitors progress toward reaching learning targets.	Assessment Literacy; Data, Analysis and Use	Student Voice and engagement	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Student develops and/or uses scoring guides periodically to assess his/her own work or that of peers.	Assessment Literacy; Data, Analysis and Use	Student Voice and engagement	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Student uses teacher and peer feedback to improve his/her work.	Assessment Literacy; Data, Analysis and Use	Student Voice and engagement	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum
Both teacher and students reflect on work and make adjustments as learning occurs.	Assessment Literacy; Data, Analysis and Use	Student Voice and engagement	Assessment Literacy; Data Review, Analysis and Use; Continuous Improvement; Academic Continuum